

Ted Stevens Anchorage International Airport 2007 Environmental Section Summary Report

Solid and Hazardous Waste management

The recycling efforts at Ted Stevens Anchorage International Airport continue to be a great success, most notably the cardboard recycling. In 2007 the airport and airport tenants in the South Terminal more than doubled the amount of cardboard that was recycled in 2006. Over 66 tons (132,120 pounds) of cardboard were recycled using the cardboard baler in the C concourse. Loose cardboard, newspaper and office paper account for another 40,000 pounds of paper recycled in 2007. Landfill disposal of the cardboard and paper would have cost ~\$3700; instead the State of Alaska has received ~\$2150.00 for the commodities. These revenues, minor as they seem, are used to offset other airport operating expenses that are used to calculate landing fees, rents, etc.

The Airport also recycled tons of other materials during 2007. Over two tons of lead acid batteries and other universal waste batteries were reclaimed. Over 25 tons of scrap metals were recycled and 2000 gallons of used oil from vehicles, heavy equipment and other State of Alaska machinery used at the airport were recycled and blended into an industrial fuel. All of these materials were recycled free of charge through arrangements negotiated by Airport Environmental and other sections.

All of the recycling efforts resulted in the airport generating less than 1000 pounds of hazardous waste in 2007. Recycling, product substitution and training airport staff on proper identification, handling, and disposal of hazardous and solid waste has contributed greatly to the airport reducing the amount of hazardous materials that is used and disposed by the airport. Maintaining status as a Conditionally Exempt Small Quantity Generator of hazardous waste throughout 2007 has allowed the airport to dispose of small amounts of hazardous wastes locally instead of shipping it to treatment facilities in the lower 48.

During 2008 Airport Environmental will be looking to improve the management of solid and hazardous waste by expanding our recycling infrastructure to encourage and include off-aircraft recycling.

Pollution Prevention & Spill Response

During 2007, 36 spills totaling ~450 gallons were reported to the Environmental Section at Ted Stevens Anchorage International Airport. As would be expected most the spills were accidental releases of jet fuel onto paved surfaces where they had minimal environmental impacts. Spill response was immediate in most cases and with the exception of one float plane crash in Lake Spenard none of the fuel spills reached sensitive environments.

Contaminated Site Investigation and Remediation

The Airport Environmental staff works closely with airport tenants and the Alaska Department of Environmental Conservation (ADEC) to address and resolve issues related

to contaminated sites on Airport lands. During 2007, the ADEC granted closure to several contaminated sites on property owned by Ted Stevens Anchorage International Airport that have been cleaned up to ADEC standards.

The ADEC also authorized “conditional closure” for a few more sites on airport property. The conditional closure status is granted when the responsible party (Anchorage International Airport in this case) has provided enough scientific data to justify that the known contamination on a property will not present a health hazard to humans or animals and does not pose a significant threat to the environment. It does not relieve the responsible party of their liability to perform further cleanup on the site if the conditions change. By applying this risk based approach to site remediation, the Environmental Section hopes to close out more of these contaminated sites in the coming years.

Water Quality

The water quality at Ted Stevens Anchorage International Airport has improved dramatically over the past several years. Whereas Lakes Hood and Spenard once failed the minimum water quality standards for several parameters, all of the chemicals of concern that placed us on the ADEC "impaired waterbody" list (ammonia, dissolved oxygen, fecal coliform) now *consistently* meet or exceed the minimum water quality standards except for dissolved oxygen which is improving. The lakes are recovering strongly from practices that in the past contributed to the degradation of the water quality. The diversion and recovery of deicing chemicals away from Lakes Hood and Spenard is the major factor in the recovery of the lakes.

During the 2006 -2007 Winter Season 501,375 gallons of aircraft deicing chemicals (propylene and/or ethylene glycol) was reportedly used at ANC. While the majority of these fluids are discharged away from the lakes, 86,432 gallons of the glycol mixtures were used in areas hydraulically connected to the lakes. Of this amount, the airport's Glycol Recovery Vehicle (GRV) picked up 6,646 gallons. Overall this is an 8 % reduction of chemicals that would have been discharged into Lakes Hood and Spenard without these efforts.

The abundance of aquatic vegetation and insects in Lakes Hood and Spenard is a good indicator that the lake ecosystem is healthy and getting stronger. During the summer of 2007 the aquatic vegetation in the lakes was removed in aircraft operating areas using an aquatic weed harvester. The goal of this program is to prevent floating and submerged weeds from causing interference with aircraft operations. Invasive species of aquatic vegetation is a huge problem in many lakes and estuaries throughout the world. Fortunately all of the various types of aquatic vegetation found in Lakes Hood and Spenard are native to Alaska and local lakes.

Continued study and management of the water quality in our lakes will ensure both the health of the waterbodies and the safety of the aviators and passengers using Lakes Hood and Spenard.

Noise Compatibility Program

The Airport has developed and continues to refine its Noise Compatibility Program. During 2007, installation of a new radar interface was accomplished ensuring that the Airport did not lose access to flight tracks after the FAA upgraded to a new Standard Terminal Area Radar System (STARS). The Airport's Flight Track & Noise Management System provides a tool to quantify aircraft noise exposure by collecting data from ten automated noise monitors that can be correlated with aircraft arrivals and departures. The system allows the Airport to monitor the flight path, altitude and speed of aircraft that arrive, depart or transfer through the airspace over Anchorage and match them to corresponding decibel levels. Data from ten noise monitors strategically placed in the surrounding community allows the Airport team to respond in a timely manner to the noise concerns of Airport neighbors and provides a means to communicate effectively with aircraft operators about minimizing community impacts.

The Residential Sound Insulation Program (RSIP) completed its fifth year of construction activities. During the 2007 season 53 homes and 2 duplexes were retrofit with acoustical windows, doors, attic insulation and ventilation system improvements to reduce interior sound levels a minimum of 5 decibels. To date, 387 homes have been retrofit with sound insulation techniques as part of our Quieter Home Program. An additional 146 apartments and 19 homes were designed and will be retrofitted during the summer of 2008.

If you have any questions regarding this information please contact Scott Lytle at 266-2129